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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/994,560	11/27/2001	Harold L. Bennett	31088-2	8731

7590

04/26/2002

C. John Brannon
Woodard, Emhardt, Naughton, Moriarty and McNett
Bank One Center/Tower
111 Monument Circle, Suite 3700
Indianapolis, IN 46204-5137

EXAMINER .

TOOMER, CEPHIA D

ART UNIT

PAPER NUMBER

1714

DATE MAILED: 04/26/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

Applicant(s)

Examiner

Group Art Unit

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- ☐ Responsive to communication(s) filed on _____
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1 1; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-21 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-21 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement

Application Papers

- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☐ All ☐ Some* ☐ None of the:
 - ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

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DETAILED ACTION

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for bituminous coal, peat, lignite or tar sands carbonaceous precursor material, does not reasonably provide enablement for all carbonaceous materials. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims. The language carbonaceous precursor material reads on far more materials than are disclosed, such as coke, subbituminous coal, and bitumen, for example. Applicant should limit the claims to those disclosed materials.

Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for peat, lignite, animal excrement, animal and vegetable products, waste

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food, paper and dry trash, does not reasonably provide enablement for all inert organic matter. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims. The terms inert organic matter reads on far more materials than are disclosed, for example, sawdust, deashed and desulfurized coal, lignin, etc.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5, 6, 15, 16 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 5 and 15, the term "thin" is indefinite. Thin is a relative term that has no comparative value.

In claims 6 and 16, the term "high" is indefinite because it is a relative term that does not have a comparative value.

Claim 21 is rejected because "dry trash" encompasses any of the other listed organic additives. Also how does the lignite and peat of (b) differs for those of (a)?

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Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 5, 9, 11, 13, 15, 19 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Bennett (US 4,273,643).

Bennett teaches a method of producing char (see abstract). The method of comprising the step of heating a blend of carbonaceous materials with inert organic additives up to 600 C for up to 3.5 hours. The material is heated in an anerboic environment (see claim 1; col. 1, lines 65-68; col. 3, lines 1-12). The material is heated in a multi-hearth roaster that contains arms that move the material through the hearth in a plow-like motion (see col. 2, lines 15-18). The char is treated with H₂, live steam and/or super-heated steam with a carbonate acceptor to remove sulfur (see col. 2, lines 50-55). After the hot gases (tar gases) and sulfur acceptor are removed a solid material remains and is the char. The char is removed from the hearth roaster and cooled (see col. 3, line 47-50).

Accordingly, Bennett teaching all the material limitations of the claims, anticipates the claims.

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.


Claims 2, 4, 10, 12, 14 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett.

Bennett has been discussed above. Bennett fails to teach that the tar gases are filtered and washed. However, no unobviousness is seen in this difference because Bennett teaches that the gases are cleaned by liquid spraying (washing) or electrostatic precipitation (filtering). The skilled artisan recognizes that both methods may be used to obtain a cleaner product.

Bennet also fails to teach that the char is deposited in an inverted cone - shaped bin. However, no unobviousness is seen in this difference because the skilled artisan would recognized that it would be easier for the char/steam mixture to drain if the char is placed in a cone - shaped bin.

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Any inquiry concerning this communication should be directed to Cephia D. Toomer at telephone number (703) 308-2509.



Cephia D. Toomer

Patent Examiner-1714

Cephia D. Toomer/om
April 3, 2002